

ABSTRACT

5 A warehousing system for palletized cargo, and an automated loading/unloading system
for use with the same. The warehousing system includes a feed conveyer and a plurality of
storage racks. A traveling conveyor carries the cargo from the feed conveyer to the individual
racks, and from the racks to a loading/unloading conveyor which carries the cargo to the
loading/unloading docks. The traveling conveyor rides on a wheeled chassis that is guided
10 between the receiving and discharge locations on tracks. The storage racks are stackable in tiers,
and the traveling conveyor has a deck that raises and lowers to be level therewith. The
automated loading/unloading dock includes a rigid, extensible plate having an upper surface for
supporting a load of palletized cargo, with a drive mechanism being mounted to the inner end of
the plate to translate it in and out of the transport vehicle. The plate carries a load of palletized
15 cargo into or out of the transport vehicle en masse. For loading, restraining doors hold the loaded
cargo within the interior of the vehicle as the extensible dock is withdrawn. When unloading, a
paddle is deployed above the upper surface of the lock member and is translated towards its inner
end so as to push the cargo onto the loading/unloading conveyor.